

What is claimed is:

- 1     1.       An air intake structure for a small watercraft having a watercraft body with a
- 2       hull constituting the lower portion thereof and a deck covering the hull, the watercraft
- 3       further having an engine disposed in the watercraft body, a drive shaft extending
- 4       rearwardly from the engine, a propeller driven by the drive shaft, and a turbocharger
- 5       for pumping intake air to the engine;
- 6               said air intake structure comprising an air cleaner case for drawing in fresh air,
- 7       and a fresh air duct pipe for operatively connecting to the air cleaner case and for
- 8       routing air from the air cleaner case to the turbocharger;
- 9               wherein said air intake structure is constructed and arranged such that when
- 10      the air intake structure is installed on a watercraft engine, the turbocharger and the air
- 11      cleaner case are separately disposed at opposite areas of the engine, with the engine
- 12      situated therebetween.

1               2. The air intake structure of claim 1, wherein the turbocharger is  
2     situated in back of the engine, and the air cleaner case is adapted for placement in front  
3     of the engine.

1               3. The air intake structure of claim 1, wherein the air cleaner case has an  
2     opening formed therein to receive the fresh air duct pipe, and wherein the fresh air  
3     duct pipe has an inlet end which fits into the opening formed in the air cleaner case.

1               4. The air intake structure of claim 3, wherein the inlet end of the fresh air  
2     duct pipe is adapted to extend inside the air cleaner case.

1               5. The air intake structure of claim 1, wherein the fresh air duct pipe  
2     comprises an inlet end with an outwardly flared terminal portion.

1               6. The air intake structure of claim 3, wherein the inlet end of the fresh air  
2     duct pipe comprises an outwardly flared terminal portion.

1           7. The air intake structure of claim 4, wherein the inlet end of the fresh air  
2         duct pipe comprises an outwardly flared terminal portion.

1           8. The air intake structure of claim 1, wherein the air cleaner case has an air  
2         intake port formed therein which faces toward the front of the watercraft when  
3         installed therein.

1           9. The air intake structure of claim 1, wherein the air cleaner case has an air  
2         intake port formed therein which faces downwardly when installed in the watercraft.

1           10. The air intake structure of claim 3, wherein the opening for the intake air  
2         duct pipe is formed substantially centrally in the bottom of the air cleaner case.

1           11. A watercraft having the air intake structure of claim 1 installed therein.

1           12. A watercraft having the air intake structure of claim 2 installed therein,  
2       with the turbocharger situated in back of the engine, and the air cleaner case situated in  
3       front of the engine.

1           13. The watercraft of claim 12, further comprising an intercooler for cooling  
2       compressed intake air after it leaves the turbocharger.

1           14. The air intake structure of claim 1, further comprising a plurality of air  
2       ducts for routing air through the watercraft body, said air ducts having a plurality of  
3       inboard openings formed therein;  
4           wherein said air intake structure is constructed and arranged such that all of  
5       the inboard openings of the plurality of air ducts therein are located on the same side  
6       of the engine as the air cleaner case.

1           15. A watercraft, comprising:

2           a watercraft body comprising a hull constituting the lower portion thereof and

3           a deck covering the hull;

4           an engine disposed in the watercraft body, a drive shaft extending rearwardly

5           from the engine, a propeller driven by the drive shaft;

6           a turbocharger situated for pumping intake air to the engine;

7           an air intake structure comprising an air cleaner case for drawing in fresh air,

8           and a fresh air duct pipe having an inlet end operatively connected to the air cleaner

9           case and an outlet end operatively connected to the turbocharger;

10          wherein said turbocharger and said air cleaner case are separately disposed at

11          opposite areas of the engine, with the engine situated therebetween.

1           16. The watercraft of claim 15, wherein the air cleaner case has an air intake

2          port formed therein which faces toward the front of the watercraft.

1           17. The watercraft of claim 15, wherein the air cleaner case has an air intake  
2           port formed therein which faces downwardly in the watercraft.

1           18. The watercraft of claim 15, wherein the air cleaner case has an opening  
2           formed therein to receive the fresh air duct pipe, and wherein the fresh air  
3           duct pipe has an inlet end which fits into the opening formed in the air cleaner  
4           case.

1           19. The watercraft of claim 18, wherein the opening for the intake air duct  
2           pipe is formed substantially centrally in the bottom of the air cleaner case.

1           20.       The watercraft of claim 15, wherein the turbocharger is situated in  
2           back of the engine, and the air cleaner case is situated in front of the engine.

1           21. The air intake structure of claim 18, wherein the inlet end of the fresh air  
2           duct pipe is adapted to extend inside the air cleaner case.

1           22. The air intake structure of claim 15, wherein the fresh air duct pipe

2       comprises an inlet end with an outwardly flared terminal portion.

1           23. An air intake structure for a small watercraft having a watercraft body

2       with a hull constituting the lower portion thereof and a deck for placement covering

3       the hull, the watercraft further having an engine disposed in the watercraft body, a

4       drive shaft extending rearwardly from the engine and a propeller driven by the drive

5       shaft;

6           said air intake structure comprising

7       an air cleaner case for introducing fresh air to the engine; and

8       a plurality of air ducts for routing air through the watercraft body, said air

9       ducts having a plurality of inboard openings formed therein;

10          wherein said air intake structure is constructed and arranged such that all of

11       the inboard openings of the plurality of air ducts therein are located on the same side

12       of the engine as the air cleaner case.

1           24. An air intake structure for a small watercraft according to Claim 23,  
2       wherein a turbocharger is located at the rear of the engine, the air cleaner case is  
3       located at the front of the engine, and all of the openings of the plurality of air ducts  
4       are located near the front of the air cleaner case.